

TUMOUR ABLATION

Minimally Invasive Cancer Treatment Alternative

WHAT IS TUMOUR ABLATION?

This is a minimally invasive procedure used to treat solid cancers. It is the direct application of thermal energy or chemicals to a tumour for the purpose of eradication or substantial destruction.

Radiological imaging is used to guide and position a special needle into the tumour. This is a percutaneous procedure, meaning it requires only a tiny hole, usually less than 3mm in which the needle is inserted.

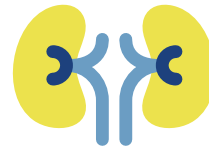
MOST EFFECTIVE ON THE FOLLOWING TYPES OF CANCER



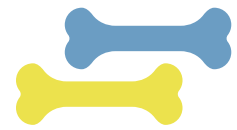
LIVER



LUNG



KIDNEY



BONE

As well as cancers that have metastasized in those areas.

COMMON TECHNIQUES

There are a variety of tumour ablation methods, be they through thermal or chemical sources. The most common are:

RADIOFREQUENCY ABLATION

High-frequency electrical currents are passed through an electrode in the needle, creating a small region of heat to kill the tumour

MICROWAVE ABLATION

Microwaves are created from the needle to create a small region of heat killing the tumour

CRYOABLATION

Liquid nitrogen or argon gas is used to create intense cold to freeze and kill the tumour

CHEMICAL ABLATION

Chemicals such as ethanol or acetic acid are directly injected into the tumour

SURGERY OR ABLATION?

Patients that are not suitable for surgery can have tumour ablation as a safer alternative that can be either palliative or curative for their symptoms. Also, small tumours, can be effectively treated with tumour ablation preventing a much more invasive surgery.

Ablation can dramatically shrink the size of a tumour, and for those that are 3cm or less in diameter has been an effective means of complete treatment, meaning that no residual cancer is present.

ACCESS

A 2014 study looking at hospitals in Ontario identified that under 45% of hospitals offered tumour ablation, meanwhile 75% of hospitals would be willing to provide those services if the appropriate funding was provided.

The hospitals that did offer Ablation procedures were focused in the Toronto area and in Southwest Ontario.



“Interventional radiology is incredibly helpful when it comes to the treatment of tumours. Whether it is a treatment with ablation or embolisation, the entire operation can be done through a small incision in the skin. This means that patients are back up on their feet in no time. It’s modern medicine, we need more of it.”

- Dr. Véronique Caty

“My Interventional Radiologist has treated my liver cancer with radio-frequency tumour ablations. I am grateful to have received this less invasive Interventional Radiology treatment, a very interesting alternative to surgery. At age 85, I continue to be active and to volunteer at my local Canoe Museum.”



BENEFITS



CANCER TREATMENT

for patients who aren't cleared for surgery



HIGH LEVEL OF SUCCESS



SHORT RECOVERY TIME



PROVEN RESULTS



Canadian Association for
Interventional Radiology
Association canadienne pour
la radiologie d'intervention

The mission of the Canadian Association for Interventional Radiology (CAIR) is to improve the health and quality of life of Canadians through minimally invasive, image guided therapy.